

The Last Jedi

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **28**
- SRM **52.7**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **3 %**
- Size with trub loss **11.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **19 %/h**
- Boil size **14.5 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **16.7 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **13 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **5.2 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.1 kg (27.5%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (25%)	79 %	10
Grain	Płatki owsiane	0.6 kg (15%)	75 %	3
Grain	Special B Malt (Castle)	0.3 kg (7.5%)	65.2 %	350
Grain	Special W Malt (Castle)	0.2 kg (5%)	73 %	300
Grain	Carafa Special I	0.25 kg (6.3%)	65 %	1000
Grain	Pszeniczny Czekoladowy	0.25 kg (6.3%)	73 %	1000
Sugar	Milk Sugar (Lactose)	0.3 kg (7.5%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	15 g	60 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Ringwood Ale	Ale	Liquid	150 ml	Wyeast Labs